

CLAIMS

1. An electronic switching module that can directly be mounted instead of the electromagnetic DC relays used in various vehicles without any modifications; which consists of a plastic casing (1) protecting said module against the external environmental conditions, an aluminium block (2) preventing over-heating of the electronic circuit, a semiconductor switching element transistor (3), a printed circuit card (4) on which the electronic circuit elements are arranged, a cover (5) wherein said printed circuit card is placed and the contacts (6) to provide the connection to the power circuit.
2. An electronic switching module according to Claim 1, characterized with a plastic casing (1) provided with a row of perforations, to allow heat transfer.
3. An electronic switching module according to Claims 1 and 2, characterized with a prismatic aluminium block (2) with fins provided on it, in order to transfer to outside the heat created in the circuit more rapidly.
4. An electronic switching module according to Claims 1 to 3, characterized with the contacts (6) adapted to be placed in the contact guides of the previously used electromagnetic relay, without requiring any modifications.
5. An electronic switching module according to Claims 1 to 4, characterized with an electronic circuit consisting of a drive circuit (7) comprising a triggering DC source (8); a resistance (R_{10}), a LO (14), a diode (Q_{10}) and a second resistance (R_{11}) all connected in series to said source and a capacitor (C_{10}) connected in parallel to all these, and a chassis (frame)

(13); a transistor (3) which is connected to the drive circuit (7) from its inlet (gate) end (9) ; a resistance (R_{12}), the DC source(drain) (10) end of the transistor (3) of which is connected to the source (11) end of the transistor; and a load (L_{10}).

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6. An electronic switching module according to Claims 1 to 4, characterized with an electronic circuit consisting of a drive circuit (7) comprising a resistance (R_{20}) connected in series to a triggering DC source, a transistor (T_{20}) and diode (Q_{20}) connected to each other in parallel which are in turn
10 connected to said resistance in series, a frame (13) connecting them to the ground and a diode (Q_{21}) connected in series to them; a diode (Q_{22}), a transistor (10) and a resistance (R_{21}) connected to each other in parallel which are in turn connected to said driving circuit (7) in series, a triggering DC source (8) feeding said circuit and a diode (Q_{23}) and a load
15 (L_{20}) connected to each other in parallel, which connect them to the frame (13).

7. An electronic switching module according to Claims 1 to 4, characterized with an electronic circuit consisting of a transistor (10) and two
20 resistances (R_{31}, R_{32}) connected to each other in parallel which are in turn connected to said resistance, and a frame (13) which connects the above components to the ground.

8. An electronic switching module according to Claims 1 to 7, characterized
25 with a printed circuit card (4) comprising an electronic circuit wherein more than one LO and more than one simultaneously operating transistor, are used in order to obtain higher current values in the power circuit.

9. An electronic switching module according to Claims 1 to 8 characterized
30 with an electronic circuit comprising a single drive circuit including

simultaneously operating LO's and more than one power circuit activated by being connected in parallel, wherein said module is used as a switch.

- 5 10. An electronic switching module characterized with an electronic circuit comprising a resistance connected in parallel to the load existing the transistor, wherein said module is used as a fuse by providing control on the current.